Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of	)	
	)	WT Docket No. 96-86
The Development of Operational and Spectrum Requirements for Meeting Federal, State and Local Public Safety Agency Communications Requirements Through the Year 2010	)	
Non-accredited Standards-Setting Organizations That Develop Standards For Public Safety Wireless Communications Equipment	)	

COMMENTS

Telecommunications Industry Association
Mobile and Personal Communications Division

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SUMMARY

The Telecommunications Industry Association Mobile and Personal Communications Division ("TIA") represents the interests of the manufacturers and other suppliers to the industry. The Division also sponsors Engineering Committees that are open to any directly and materially interested party who wishes to contribute to TIA's voluntary, consensus, Standards Program. TIA has a Memorandum of Understanding with the users of Public Safety equipment to work cooperatively in the development of technical standards for this industry segment. TIA has issued Telecommunications Systems Bulletins ("TSBs"), Interim Standards, and technical recommendations in support of a program known as Project 25.

With regard to the FCC's Public Notice, TIA agrees with the FCC that Section 273 of the Telecommunications Act of 1996 was not intended by Congress to apply to wireless equipment, including Public Safety equipment. With regard to the question of whether the principles of Section 273 should be mandated by the FCC to apply to Public Safety standards, TIA believes the industry is best served by a voluntary, consensus standards process, that is pro-competitive, and able to adapt as the industry's needs change. FCC regulatory requirements often take years to change. TIA's User Premises Equipment Division and the industry have been waiting over 9 years for changes in certain FCC regulations, thus, demonstrating why "voluntary" is better than "mandatory." This is also in accordance with recent Congressional guidance to use voluntary standards for regulatory purposes.

TIA has already produced a variety of documents in support of the needs of Public Safety and many of these documents formed the basis of an International Telecommunication Union Recommendation on dispatch system standards. TIA Standards and American National Standards have a pro-competitive effect since

underlying essential patents are required to be available royalty-free or on terms that are reasonable and non-discriminatory. Manufacturers, large and small, are free to choose whether they wish to build standardized equipment and compete in the marketplace.

FCC staff concerned with Public Safety issues would be welcomed as participants in TIA standardization activities if the staff chooses to participate, as encouraged by Congress.

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COMMENTS

The Telecommunications Industry Association Mobile and Personal Communications Division ("TIA") hereby offers its Comments in response to the FCC's Public Notice, FCC 96-403, released October 9, 1996 ("Public Notice"), that requested Comments and Replies on the issue of Non-Accredited Standards Developing Organizations ("NASDOs") that develop standards for Public Safety wireless communications equipment. In the Public Notice the Commission discusses the issues the FCC raised in the Notice of Proposed Rulemaking ("NPRM") in this Docket, released April 10, 1996, concerning the development of operational, technical, and spectrum requirements for meeting Federal, state, and local public safety agency communication requirements through the year 2010. The Commission also notes that the FCC and the National Telecommunications and Information Administration ("NTIA") had also established a Public Safety Wireless Advisory Committee ("PSWAC") to address many of the same issues raised in the NPRM. A Subcommittee of PSWAC

recommended a baseline technology for analog applications. According to the Public Notice, the Subcommittee further recommended "that a group comprised of experts from government, industry, and users be organized, following the termination of the Committee's work to examine a baseline interoperability technology that could be used in digital systems." (Public Notice, pp. 1-2) The PSWAC recommended that follow-up efforts be continued to advise the Commission and NTIA on public safety wireless communications and adopted the Subcommittee's recommendation that future standards be developed in a fair and open process.

Statement of Interest

TIA's Mobile and Personal Communications Division represents manufacturers, suppliers, and others that would be impacted by the proposals contained in the NPRM and the Public Notice. The Division has a Section which specifically focuses on the needs of the Private Land Mobile community including the public safety segment of that community. TIA also sponsors a Engineering Committee TR-8 and its Subcommittees which develop the technical standards for private land mobile systems and equipment, including public safety systems. The TR-8 Engineering Committee utilizes TIA's American National Standards Institute ("ANSI") accredited processes, and is authorized to produce a variety of documents including American National Standards ("ANS"). TIA's Engineering Committees are not limited to only TIA members, but are open to all directly interested parties -- whether TIA members or not -- as specified in ANSI rules and TIA's Engineering Manual. Thus, TIA believes its ANSI-accredited process for a Standards Developing Organization ("SDO") meets the goals expressed by the PSWAC Subcommittee recommendation for a fair and open process.

The TIA Standards and American National Standards and other documents produced by TIA are "voluntary" in nature and industry participants choose whether to

build equipment or systems that comply with the TIA Standards. Sometimes the FCC has used TIA Standards in its regulatory work and made them "mandatory" as was the case with the TIA Standard for analog cellular equipment and the Standard to define Hearing Aid Compatibility for wireline telephones, see Section 68.316. Other times the FCC "recommends" use of TIA documents but does not make them mandatory such as TIA's Telecommunications Systems Bulletin ("TSB") for Part 68 tests, TSB-31-A, "Part 68 Rational and Measurement Guidelines," or microwave interference requirements for Point-to-Point microwave systems, TSB-10-F, "Interference Criteria for Microwave Systems." FCC staff often attend TIA Engineering Committee meetings and assist in the creation of the standards as was the case in ANSI/TIA/EIA-631-96, "Telecommunications Telephone Terminal Equipment Radio Frequency Immunity Requirements for Equipment Having an Acoustic Output" (ANSI/TIA/EIA 631 96) (April 1996).

TIA Engineering Committees often provide technical assistance to the FCC and its staff in areas where the TIA Engineering Committees house the technical experts for the industry. TIA also formulates standards used by other Federal agencies in carrying out their statutory missions. For example, TIA is working jointly with Accredited Standards Committee T1, service providers, and the law enforcement community represented by the Federal Bureau of Investigation ("FBI") to produce the standard for Lawfully Authorized Electronic Surveillance ("LAES") to implement the technical aspects of the Communications Assistance for Law Enforcement Act of 1994 ("CALEA"). Thus, TIA Standards and other documents are well known and used throughout the industry and by Federal agencies.

TIA has a specific program directed to the needs of the Public Safety community. TIA entered into a Memorandum of Understanding ("MOU") with the Association of Public Safety Communications Officials ("APCO"), the National Association of State Telecommunications Directors ("NASTD"), and certain Federal Agencies ("FED") to

provide technical recommendations and to develop standards and other documents in support of a APCO/NASTD/FED Project known as "APCO Project 25" or simply "Project 25."

The 1993 MOU also contemplated that TIA would develop compatible and supportive TIA Specifications, Interim Standards and/or American National Standards ("TIA Standards") and TIA Bulletins concerning system structure and definitions, services, protocols, interfaces, equipment performance, and the like related to Project 25. Such TIA Standards could be necessary to insure the compatibility, interoperability, and minimum performance of radio equipment intended for use in systems conforming to the APCO/NASTD/FED Project 25 Standard.

Under the MOU it is contemplated that APCO/NASTD/FED will have copyright on some documents and have the final approval authority over those documents, and other documents will be created and approved following TIA's procedures with TIA holding the copyright on the TIA documents. TIA Engineering Committee TR-8 may also provide technical recommendations on specific APCO/NASTD/FED documents, but the Project 25 Steering Committee is not bound to accept or reject those recommendations.

The Memoranda of Understanding between TIA and APCO/NASTD/FED specifically discuss the two categories of documents; those under control of and copyrighted by APCO/NASTD/FED and those documents under the control of and copyrighted by the TIA. The 1993 MOU, paragraph 5, states:

> Accordingly the APCO Project 25 Standard has or will be adopted, revised, and owned by APCO/NASTD/FED solely in accordance with its rules, regulations of procedures. TIA standards, as described in paragraph 4 above will be adopted, revised, and owned by TIA solely in accordance with its rules, regulations and procedures.

TIA documents go through TIA's balloting process, and APCO/NASTD/FED documents -- in accordance with the MOU -- must follow the rules, regulations or procedures of APCO/NASTD/FED.

Currently APCO/NASTD/FED, as part of its current procedures, is submitting each proposal to TIA's Engineering Committees for review, comment, and, if the Formulating Group so elects, publication of a TIA document. These TIA documents, in accordance with the MOU and TIA's procedures, do go through TIA's balloting process. The documents that have been balloted by TIA Formulating Groups and published by TIA are documents that TIA owns and controls. The MOU does provide a copyright license to APCO for certain TIA documents for certain standards purchasers if such documents are made a part of the APCO/NASTD/FED Project 25 Standard. Throughout the TIA process there are checkpoints where complaints can be filed if any party believes the TIA Engineering Manual has not been followed and appeals can be taken at numerous points in the process. These complaint and appeals processes have been exercised extensively during the creation of documents for Project 25, thus, ensuring that the resulting documents have gone through a thorough review and fair and open process.

Thus, there already is in place a TIA fair and open procedure to address standards needs of the Public Safety community.

Section 273 was not intended to apply to wireless equipment.

TIA as an association was very active in the legislative debate that lead to the enactment of Section 273 of the Telecommunications Act of 1996. TIA was also an active participant in the FCC's Rulemaking to implement the default dispute resolution mechanism required by that Section. Since the Telecommunications Act of 1996 removed the restrictions on the Regional Bell Operating Companies ("RBOCs") from manufacturing telecommunications equipment and customer premises equipment, there

was a Congressional concern that a non-accredited standards-setting entity owned by the RBOCs could create and issue standards that would advantage the owners of that standards-setting entity. The RBOCs currently own Bellcore and Bellcore would be treated as a NASDO under Section 273. However, as the Public Notice highlights, the equipment covered by Section 273, the definition of "industry-wide" standards and "generic network equipment requirements" have very precise definitions in Section 273 limited to wireline equipment and software. The Public Notice (p. 2) correctly concludes that: "the requirements of Section 273(d) of the Act apply specifically to the development of standards for telecommunications equipment, customer premises equipment and software used in the provision of wireline telephone exchange service, and are not applicable to non-accredited standards-setting organizations that develop standards for public safety wireless communications equipment." (emphasis added)

Thus, as a statutory matter, this Section of the Telecommunications Act of 1996 was not intended by Congress to cover Public Safety wireless equipment.

Should the "principles" of Section 273 apply to Public Safety equipment?

After noting that Section 273 does not cover NASDOs which generate standards for public safety equipment, the FCC seeks comment in the Public Notice (p. 2) on "whether the general principles articulated in Section 273(d)(4) nonetheless may be useful in the development of standards initiated in the future for public safety equipment." Further, the FCC questions whether it should exercise any statutory authority it may pose to mandate a particular process for standards for Public Safety wireless communications equipment and systems.

At the present time there are numerous points along the "standards continuum." A company or organization may have its own needs for technical documents to procure or specify equipment. These documents would be proprietary to that company or

organization and used with its vendors. A company or organization may wish to collaborate with other like-minded parties to produce what could be called a "consortia or forum" document. For example, the 3 major automobile manufacturers have pooled their interests in the United States Council for Automobile Research ("USCAR") to create and issue USCAR standards for certain equipment used in the fabrication of an automobile. In telecommunications there are also such fora or consortia, such as the ATM Forum or the Cellular Digital Packet Data Forum ("CDPD Forum"). As long as antitrust and similar laws are not violated, there is nothing wrong with such collaborative efforts if they satisfy a legitimate need of the parties who create and use them. However, some consortia/fora have been sued on antitrust grounds, and often such consortia/fora do not address essential patent issues in their documents until late in the process and this may slow up their work. The most open processes are those accredited by ANSI such as TIA's ANSI-accredited processes.

Often what the industry desires are documents that have gone through such a process that is structured to get all points of view from manufacturers, users, the public, government, etc., and that has in-place procedures for due process, openness, appeals, essential patent intellectual property rights, etc. When this is the desired deliverable, then ANSI-accredited processes such as TIA's or Committee T1's are used by the telecommunications industry. In the automobile industry, the equivalent would be the Society of Automotive Engineers ("SAE") instead of USCAR.

The major elements of the ANSI process are: openness, balance and lack of dominance, consensus, appeals mechanisms, and the ANSI patent policy. Congress has specifically directed Federal agencies to look toward such processes in a new law that took effect in March, 1996, the National Technology Transfer and Advancement Act of 1995. Section 12 of that Act provides new Congressional direction to Federal agencies. Specifically that Section provides:

Section 12 . . .

(d) UTILIZATION OF CONSENSUS TECHNICAL STANDARDS BY FEDERAL AGENCIES; REPORTS-

(1) IN GENERAL- Except as provided in paragraph (3) of this subsection, all Federal agencies and departments shall use technical standards that are developed or adopted by voluntary consensus standards bodies, using such technical standards as a means to carry out policy objectives or activities determined by the agencies and departments.

(2) CONSULTATION; PARTICIPATION- In carrying out paragraph (1) of this subsection, Federal agencies and departments shall consult with voluntary, private sector, consensus standards bodies and shall, when such participation is in the public interest and is compatible with agency and departmental missions, authorities, priorities, and budget resources, participate with such bodies in the development of technical standards.

(3) EXCEPTION- If compliance with paragraph (1) of this subsection is inconsistent with applicable law or otherwise impractical, a Federal agency or department may elect to use technical standards that are not developed or adopted by voluntary consensus standards bodies if the head of each such agency or department transmits to the Office of Management and Budget an explanation of the reasons for using such standards. Each year, beginning with fiscal year 1997, the Office of Management and Budget shall transmit to Congress and its committees a report summarizing all explanations received in the preceding year under this paragraph.

(4) DEFINITION OF TECHNICAL STANDARDS- As used in this subsection, the term `technical standards' means performance-based or design-specific technical specifications and related management systems practices.

Given this new Congressional guidance, as well as the FCC's own review via the Network Reliability and Interoperability Council ("NRIC III") Focus Group II work looking at the role of the FCC in standards setting, the Commission may wish to consider these additional issues before it considers creating any new regulations on NASDOs for Public Safety equipment. A key element of the new law is "voluntary." TIA does not believe the FCC should mandate by regulation any particular standards process.

Regulations once issued, can take an inordinately long time to change. The industry has been waiting years for changes to the FCC's Part 68 Rules.

In its CC Docket No. 93-268 NPRM Comments (pp. 2-3) and its recent Petition for Reconsideration on the Order released this year in that Docket, TIA's User Premises Equipment Division noted that the FCC's rulemaking processes should be streamlined. The Ameritech Petition for Rulemaking to add Public Switched Digital Service ("PSDS") requirements to Part 68 was filed October 26, 1987 and the Southwestern Bell Telephone Company Petition for Rulemaking to add Integrated Services Digital Network ("ISDN") to Part 68 was filed August 23, 1991. Such delays of over 9 years before an Order becomes effective do not appear to serve the public interest and jeopardize harmonization efforts with other countries for technical regulations. The same could become true for Public Safety, if the Commission decides to issue regulations instead of relying on voluntary industry standards. TIA suggests more reliance on industry standards as the appropriate alternative to address this issue.

TIA has produced a variety of documents for Project 25 and Public Safety use.

TIA has several classes of documents that a Formulating Group may choose to create. Telecommunications Systems Bulletins ("TSBs") contain information of value to the industry but they are not TIA Standards and do not come under TIA's Intellectual Property Rights ("IPR") policy. They often are issued to give early warning of an area being considered for standardization as well as to provide test procedures or other useful information. TSBs require a 2/3 vote of the Formulating Group and approval of the Chair of the TIA Technical Committee or the TIA Technical Standards Subcommittee ("TSSC") to be issued. TIA has issued several TSBs related to Project 25.

TIA Interim Standards or "ISs" are Standards that fall within the TIA IPR policy. The Interim Standards process requires the Formulating Group to demonstrate "consensus" on the content and an effort to resolve negative ballots. Interim Standards do not require unanimity in the final voting and some are issued even though there may be one or two parties who do not like the document or disagree with the content. If it is determined that there is industry consensus and the TIA Engineering Manual was followed, the document will be issued as a TIA Interim Standard. Interim Standards are often used to signal new and evolving technology since they are required to be reaffirmed, revised, or rescinded every year, and they can only exist as Interim Standards for 3 years from the initial issuance date. After that, they should be advanced to full TIA and American National Standard status or rescinded. TIA has also issued Interim Standards related to Project 25.

TIA Standards that are American National Standards or ANS, have gone through an additional level of industry balloting as a result of publication of a Standards Proposal or "SP" Notice in ANSI Standards Action. ANSs also have the record of their development reviewed by the ANSI Board of Standards Review ("BSR") in addition to TIA's TSSC review. Both of these are procedural reviews and are not directed to the technical content of the standard. American National Standards are required to be reviewed at least every 5 years to see if they should be affirmed, revised or rescinded. They can be reviewed more frequently than that, and TIA was reviewing its Fiber Optics standards every 18 months when that technology was evolving quickly.

TIA Standards are often used as the basis for USA contributions to international standards groups such as the International Telecommunication Union ("ITU"), the International Electrotechnical Commission ("IEC"), or the International Organization for Standardization ("ISO"). TIA's Project 25 documents were contributed to and accepted by the ITU for dispatch radio systems.

TIA Standards and ANSI Standards have a pro-competitive effect.

One of the issues being considered by the FCC in the NPRM and in the Public Notice is "the means to promote competition in the supply of goods and services used by public safety agencies." (Public Notice, p. 1) As stated, TIA is developing compatible and supportive TIA Specifications, Interim Standards and/or American National Standards ("TIA Standards") and TIA Bulletins concerning system structure and definitions, services, protocols, interfaces, equipment performance, and the like related to Project 25. Such TIA Standards could be necessary to insure the compatibility, interoperability, and minimum performance of radio equipment intended for use in systems conforming to the APCO/NASTD/FED Project 25 Standard.

Since all TIA Standards, whether Interim Standards or American National Standards, need to comply with the TIA IPR policy which is based on ANSI's patent policy, any essential patents required to build to the TIA Standard must be available to all parties on terms that are royalty-free or via licenses that are reasonable and non-discriminatory. This has a pro-competitive effect on the industry since a IPR holder must license any essential patents to even its competitors on terms that are reasonable and non-discriminatory. These policies are consistent with ISO, IEC, and ITU policies. By allowing standards based on patents, American consumers are assured of standards that reflect the latest innovation and the highest technology that the great technical minds of this country can deliver. The United States has a technical position envied in the world and frequently there are attempts by other countries to force licensing of U.S. patents as a way of generating a "technology grab" of U.S. inventions. For example, TIA and ANSI joined the U.S. Government several years ago in opposing an effort by the European Telecommunications Standards Institute to force compulsory licensing on an extraterritorial basis.

TIA agrees with ANSI that the current voluntary consensus standards process takes note of the reasons why patent protection exists in the first place -- to encourage innovation and development of new technologies. As ANSI stated in testimony to the Federal Trade Commission last year, December 1, 1995, p. 10: "When proprietary technology is incorporated into a standard, it is available to all competing companies. This spurs the rate of technology's implementation and enhances U.S. competitiveness."

TIA encourages the early, voluntary disclosure of patents that relate to standards work. Committee and Subcommittee Chairs ask during meetings whether any parties are aware of any patents that relate to the contributions under discussion. When potential patents are disclosed, TIA staff contacts the patent holders to ensure that essential patents will be licensed in accordance with the TIA and ANSI IPR policies. This process has worked well both in Public Safety and other sectors. For example, the entire cellular industry is based on TIA's cellular telephone standards. If a license will not be made available and the patent is essential to the standard, then the standard will not be approved for publication or, if published at the time the information is made available, rescinded. In the rare case where a party may make a bogus or contested claim of essentiality to try to stop a standard from issuing, TIA may issue the standard after appropriate additional review and special labeling. Individual manufacturers, large and small, are free to determine whether to take licenses from the IPR holders, but this is a business decision they must make since the TIA standards are all voluntary. TIA is aware of some Public Safety equipment manufacturers who have publicly advised they will not build equipment to TIA's Standards. They are free to choose under a voluntary system whether to compete in the market for standardized equipment. Standards allow companies, large and small, to choose what market or market niche they desire to serve.

CONCLUSION

TIA agrees with the FCC that Section 273 of the Telecommunications Act of 1996 does not cover Public Safety wireless communications equipment. Concerning whether the FCC should "require" a particular process to be followed for standards for Public Safety wireless communications equipment, TIA believes such a requirement would be contrary to recent Congressional guidance to utilize "voluntary" processes, and is also an issue being worked in the Network Reliability and Interoperability Council's Focus Group II concerned with the FCC's role in the standards process. TIA currently has an ANSI-accredited process that can and is being used to generate standards and other documents for the Public Safety segment of the industry. FCC staff would be more than welcome to follow Congressional suggestions and "participate" in these standards meetings as FCC staff has done on other TIA Engineering Committees.

Respectfully submitted,

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